

ALBINISM IN THE PIGEYE WHALER SHARK *CARCHARHINUS AMBOINENSIS*
(MÜLLER AND HENLE) FROM QUEENSLAND

R.J. MCKAY AND K. BEINSSSEN

McKay, R.J. and Beinssen, K. 1988 11 7: Albinism in the pigeye whaler shark *Carcharhinus amboinensis* (Müller and Henle) from Queensland. *Mem. Qd Mus.* 25(2): 463–464. Brisbane. ISSN 0079–8835.

An albino, immature female, pigeye whaler shark *Carcharhinus amboinensis* measuring 743 mm in total length was netted with many other normally pigmented sharks at Station Point between Cape Keppel and Seahill on the northern end of Curtis Island, Queensland, February 1987. This appears to be the first known albino individual of this species and the first record of albinism in the family Carcharhinidae.

□ *Sharks, albinism, Carcharhinus amboinensis*

R.J. McKay, Queensland Museum, PO Box 300, South Brisbane, Queensland 4101, Australia; K. Beinssen, Queensland National Parks and Wildlife Service, PO Box 1395, Rockhampton, Queensland 4700, Australia; 16 June, 1987.

A pigeye whaler shark *Carcharhinus amboinensis* (Müller and Henle, 1841) netted by Gladstone commercial fisherman Mr Lance Hayward appears to be the first record of albinism in the family Carcharhinidae. The shark was taken in an 8 inch monofilament barramundi net at Station Point, between Cape Keppel and Seahill on the northern end of Curtis Island, Queensland, February 2, 1987. Mr Hayward recognized the shark to be a rarity because it was the first albino individual he and other long-standing Gladstone fisherman had seen or heard of. The specimen was given to the junior author who forwarded it to the Queensland Museum for identification. The specimen (see figure), registered I.22687, is a gutted immature female 743 mm in total length; first dorsal fin height 65 mm; second dorsal fin height 19 mm; length of rear tip of second dorsal

fin 26 mm; internasal distance 50 mm; preoral distance 49 mm; lower teeth 11–2–11; precaudal vertebrae 91. The body and fins are entirely white, with pink irises of the eyes, as in a true albino (Fig. 1). Many other sharks of this species were also netted on the day of capture. They are frequently taken in barramundi *Lates cavifrons* nets.

The pigeye whaler grows to a length of 280 cm and according to Compagno (1984) are born at 71 to 72 cm. The smallest free-living specimen seen by Garrick (1982) measured 710 mm, and specimens from the Fitzroy River and near Seahill, Curtis Island described by Whitley (1943) were free-living at 732 and 804 mm in late March, 1943.

Albinism in elasmobranchs is relatively rare (see Dawson 1964, 1971; Nakaya 1973). Albinism in sharks has been reported for *Notorynchus*



maculatus (Herald, 1953), *Mustelus californicus* (Herald, Schneebeli, Green and Innes, 1960; Cohen, 1973; Talent, 1973), *Sphyrna lewini* (McKenzie, 1970), *Stegastoma fasciatum* (Nakaya, 1973) and *Triakis semifasciata* (Follett, 1976). This is the first record of albinism in the genus *Carcharhinus* and in the family Carcharhinidae *sensu stricto*.

ACKNOWLEDGEMENTS

We thank Mr Lance Hayward for forwarding the shark for positive identification and for making enquiries on our behalf. We are most grateful for radiographs of the albino specimen supplied by Mr John Farrington and staff of the Department of Radiography, Royal Brisbane Hospital.

LITERATURE CITED

- COHEN, J.L. 1973. An albino grey smoothhound *Mustelus californicus* Gill. *Calif. Fish Game* 59(3): 210-211.
- COMPAGNO, L.J.V. 1984. FAO species catalogue, vol. 4. Sharks of the world. An annotated and illustrated catalogue of shark species known to date. Part 2. Carcharhiniformes. *FAO Fish. Synop.* (125)Vol. 4(2): 251-655.
- DAWSON, C.E. 1964. A bibliography of anomalies of fishes. *Gulf Res. Rep.* 1(6): 308-399.
1971. A bibliography of anomalies of fishes. Supplement 2. *Gulf Res. Rep.* 3(2): 215-239.
- FOLLETT, W.I. 1976. First record of albinism in the leopard shark (*Triakis semifasciata* Girard). *Calif. Fish Game* 62(2): 163-164.
- GARRICK, J.A.F. 1982. Sharks of the genus *Carcharhinus*. *NOAA Tech. Rep. NMFS Circ.* (445): 1-194.
- HERALD, E.S. 1953. The 1952 shark derbies at Elkhorn Slough, Monterey Bay, and at Coyote Point, San Francisco Bay. *Calif. Fish Game* 39(2): 237-243.
- HERALD, E.S., SCHNEEBELI, W., GREEN, N., AND INNES, K. 1960. Catch records for seventeen shark derbies held at Elkhorn Slough, Monterey Bay, California. *Calif. Fish Game* 46(1): 59-67.
- MCKENZIE, M.D. 1970. First record of albinism in the hammerhead shark. *Sphyrna lewini* (Pisces : Sphyrnidae). *Elisha Mitchell Sci. Soc. J.* 86(1): 35-37.
- NAKAYA, K. 1973. An albino zebra shark *Stegostoma fasciatum* from the Indian Ocean, with comments on albinism in elasmobranchs. *Jap. J. Ichthyol.* 20(2): 120-122.
- TALENT, L.G. 1973. Albinism in embryo grey smoothhound sharks, *Mustelus californicus*, from Elkhorn Slough, Monterey Bay, California. *Copeia* 1973(3): 595-597.
- WHITLEY, G.P. 1943. Ichthyological descriptions and notes. *Proc. Linn. Soc. N.S.W.* 68: 114-144.

A NEW SPECIES OF *RIDGEWAYIA* (COPEPODA, CALANOIDA)
FROM THE GULF OF CARPENTARIA

B.H.R. OTHMAN AND J.G. GREENWOOD

Othman, B.H.R. and Greenwood, J.G. 1988 11 7: A new species of *Ridgewayia* (Copepoda, Calanoida) from the Gulf of Carpentaria. *Mem. Qd Mus.* 25(2): 465-469. Brisbane. ISSN 0079-8835.

Plankton collections in the Gulf of Carpentaria yielded two male specimens of a new species of copepod, *Ridgewayia flemingeri*, which is here described. The genus now contains 11 species, with the new species showing close similarity to *Ridgewayia typica* Thompson and Scott, 1903, and *Ridgewayia canalis* (Gurney, 1927). Males of *R. flemingeri* differ from all others of the genus in having numerous hairs on segments 11-17 of the right antennule, and in structure of the 5th legs.

□ *Copepoda, Calanoida, Ridgewayia, Gulf of Carpentaria, Australia*

B.H.R. Othman, 121 Jalan Athinahan Dua, Taman Tun Dr Ismail, 60000 Kuala Lumpur, Malaysia; J.G. Greenwood, Department of Zoology, University of Queensland, St Lucia, Queensland 4067, Australia; 1 January, 1987.

During studies of copepods from the Gulf of Carpentaria, two male specimens belonging to a new species of *Ridgewayia* were sampled. The species is described below. The specimens were taken in a net of mesh aperture size 140 μ m towed from near-bottom to the sea surface through 50 metres of water in stepped-oblique hauls. Specimens were examined and dissected in glycerine/water and drawings were made using a Leitz HM-LUX microscope with the aid of a camera lucida. Type specimens have been deposited in the Queensland Museum (QM).

***Ridgewayia flemingeri* sp. nov.**
(Figs 1 A-G, 2 A-F)

MATERIAL EXAMINED

HOLOTYPE: QM W12200 ♂♂ of total length 0.7 mm.

PARATYPE: QM W12201 ♂♂ dissected on two slides.

Both type specimens collected in plankton sample No. 8A2 at lat. 14°0.0'S, long. 141°25.5'E in the Gulf of Carpentaria on August 14th 1975 (see Rothlisberg and Jackson (1982) for sample details).

DESCRIPTION

Male: Length (TL) from anterior tip of prosome to extremity of furcal rami for 2 specimens is 0.63 and 0.70 mm. Prosome length to width ratio 2.28:1; prosome to urosome length ratio 2.51:1.

Body slender (Fig. 1 A,B) and more elongate than most other members of the genus. Head free from thorax. Fourth and 5th thoracic somites separated, 5th tapering into 2 symmetri-

cal, narrow and slightly pointed margins in dorsal view; in lateral view these margins smoothly rounded except for conspicuous notch on ventral surface (Fig. 1 B). Posterior corners of 5th somite extend to posterior end of genital segment.

Urosome 5-segmented, all somites symmetrical but vary in size. Proportional lengths of these somites are given in Table 1.

TABLE 1: Proportional lengths of urosomal somites and furcal rami.

Somites Proportions	1	2	3	4	5	furcal rami
	24	21	19	13	4	19 = 100

Anal operculum with dentate distal margin is visible from dorsal aspect. Each furcal ramus about 1½ times longer than broad, with 5 prominent setae: First seta (from inner margin) about length of urosome; 2nd seta very strong, extending about twice length of urosome; 3rd seta strong and slightly longer than 1st; 4th seta 0.5 × length of 3rd; 5th seta equal length to furca itself.

First antenna of similar length to prosome. Left antenna 26-segmented, right with 22 free segments. Proximal 2 segments of right antenna broad and long, 4 distal segments narrow and long (Fig. 1 C); segments 11-17 furnished with plumous hairs on surface.

Second antenna with both basipod and endopod 2-segmented. First basipodal segment